

Proposed TCE Short-Term Action Levels and Ambient Air TCE Data in Region 9

Proposed Residential ALs	TCE ($\mu\text{g}/\text{m}^3$)	TCE (ppb)	Notes
"Prompt" Action	2	0.37	HQ=1, equal to IRIS reference dose (RfCi)
"Immediate" Action	6	1.1	HQ=3. Potential for temporary relocation.

California Ambient Air Monitoring Data (1989-2011)

<http://www.arb.ca.gov/adam/toxics/sitesubstance.html>

- 16 monitoring sites: Los Angeles (North Main St.), North Long Beach, Burbank, Riverside, Chula Vista, El Cajon, Calexico, Santa Barbara, Simi Valley, Bakersfield, Fresno, Stockton, San Francisco, San Jose, Concord, Fremont.
 - ARB TCE data in Calif ambient air expressed in ppb
- Maximum detections exceeded the immediate action level of 1.1 ppb 12 times:
 - Los Angeles: 1999, 1998, 1995, 1994, and 1992
 - Burbank: 1991
 - Riverside: 1990
 - El Cajon: 2000, 1994
 - Bakersfield: 1996
 - Stockton: 2008
 - Concord: 1997, 1990
- 90th percentile values were all less than the immediate action level of 1.1 ppb (suggesting that the maximum detections represent rare events) and most 90th percentile values were less than the RfCi of 0.37 ppb

Phoenix, AZ Joint Air Toxics Assessment Project (JATAP, 2005 data)

- 6 urban locations: Greenwood, JLG Supersite, St. Johns, Salt River, South Phoenix, West Phoenix
- Maximum detections ($0.5\text{--}11.42 \mu\text{g}/\text{m}^3$) exceeded the immediate action level of $6 \mu\text{g}/\text{m}^3$ at one site (West Phoenix)
- Average TCE concentrations ($0.18\text{--}0.42 \mu\text{g}/\text{m}^3$) were less than the RfCi of $2 \mu\text{g}/\text{m}^3$ at all locations

National Data on TCE in Ambient Air

(summarized from the IRIS Toxicity Assessment for TCE, 2011)

- EPA's Air Quality System database (1999-2006 data; 162-313 monitors located in 20-41 states)
 - data heavily weighted to industrial areas
 - Overall average ($0.23 \mu\text{g}/\text{m}^3$) less than the RfCi of $2 \mu\text{g}/\text{m}^3$
 - Maximum detected ($4.38\text{--}18.44 \mu\text{g}/\text{m}^3$) exceeded the immediate action level of $6 \mu\text{g}/\text{m}^3$ in 6 years (2000, 2001, 2002, 2003, 2005, 2006)
- Modeling (county level) of representative national ambient TCE concentrations (1999):
 - county median TCE ranged $0\text{--}3.78 \mu\text{g}/\text{m}^3$; national median ($0.054 \mu\text{g}/\text{m}^3$) less than the RfCi